

Serial No. 10/085,575

REMARKS

Non-elected claims 1-5 have been cancelled. New claims 17-21 are added in this amendment. Applicant hereby confirms the election of claims 6-16.

Claims 6, 10 and 13 have been rejected as anticipated by Swinbanks (US 5,838,802). Swinbanks includes an error microphone 11 for detecting residual noise. Claims 6, 10 and 13 have been amended to clarify that the residual vibration is calculated. Swinbanks simply measures the residual noise and does not calculate it. More specifically, as stated at column 2, line 64, Swinbanks discloses that the microphones 11 detect any residual noise remaining after interference between the primary noise produced by the noise source 3 and the interfering sound produced by the loudspeakers 1. Thus, it is respectfully submitted that Swinbanks discloses measuring a primary vibration, generating an interfering sound to at least partially cancel out the primary vibration, measuring/detecting any remaining residual vibration, and generating, if necessary, a second interfering sound to cancel out the remaining residual vibration. Swinbanks does not disclose, teach, or suggest a control unit which generates a first command signal based upon a measured vibration, constraining a first component of the first command signal, calculating a residual vibration resulting from the constraint of the first component and generating a second command signal based upon said residual vibration. Therefore, claims 6, 10 and 13 are not anticipated by Swinbanks.

Claims 6-16 have been rejected as obvious over Southward (US 5,627,896) in view of Hodgson (US 5,526,292). Southward only mentions determining the residual disturbance using an error sensor 30 (col. 2, lines 17-20). That is, Southward discloses measuring a vibration and generating a signal to at least partially cancel out the measured vibration wherein the signal is

Serial No. 10/085,575

limited so that the produced signal does not exceed an allowed maximum. Southward however does not disclose, teach, or suggest a control unit which generates a first command signal based upon a measured vibration, constraining a first component of the first command signal, calculating a residual vibration resulting from the constraint of the first component and generating a second command signal based upon said residual vibration. Rather, similar to Swinbanks discussed above, Southward only mentions that it is known to measure/detect any residual vibration/noise.

Hodgson similarly discloses only "error sensor means" (col. 8, lines 60-63). More specifically, Hodgson discloses error sensor means for detecting (i.e., measuring) any residual internal level. Thus, it is respectfully submitted that Hodgson also does not disclose, teach, or suggest calculating a residual vibration resulting from constraining the first command signal and thus, Hodgson does not rectify the shortcomings of Southward. Therefore, neither Southward nor Hodgson disclose "calculating" residual vibration, as claimed. Therefore, claims 6-16 are not obvious over Southward in view of Hodgson.

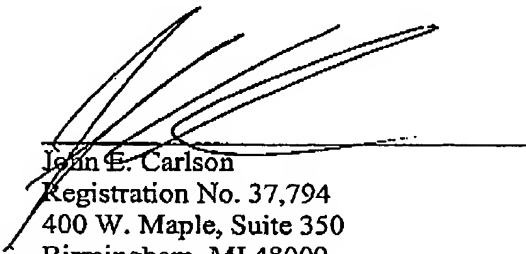
Figure 1 has been amended to delete the reference numeral "140." A replacement sheet is submitted herewith. Claim 12 has been amended to address the dependency error. The Abstract and paragraph 11 have been amended as requested.

Serial No. 10/085,575

If any additional fees or extensions of time are required, please charge to Deposit
Account No. 50-1482.

Respectfully submitted,

CARLSON, GASKEY & OLDS



John E. Carlson
Registration No. 37,794
400 W. Maple, Suite 350
Birmingham, MI 48009
(248) 988-8360

Dated: May 23, 2005